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Published in:
European Heart Journal. Cardiovascular Pharmacotherapy

DOI:
[10.1093/ehjcvp/pvw015](https://doi.org/10.1093/ehjcvp/pvw015)

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Document Version
Publisher's PDF, also known as Version of record

Publication date:
2016

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):
de Leeuw, A. E., & de Boer, R. A. (2016). A translational viewpoint explaining its potential salutary effects. *European Heart Journal. Cardiovascular Pharmacotherapy*, 2(4), 257.
<https://doi.org/10.1093/ehjcvp/pvw015>

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A translational viewpoint explaining its potential salutary effects

Dear Editor,

We thank Dr Martinez-Martin *et al.* for their interest in our article.¹ In their letter, the authors question if 'SGLT1 has no compensatory role during the inhibition of SGLT2'. We referred to a study published by Gembardt *et al.*² in diabetic *ob/ob* mice with complete pharmacological blockade of SGLT2. In contrast to the study published by Rieg *et al.*,³ Gembardt did not report an upregulation of renal SGLT1 protein levels and differential results on the levels of SGLT1 mRNA in *ob/ob* diabetic mice under complete SGLT2 blockade. But the observed (incomplete) 30–50% inhibition of reabsorption by SGLT2 inhibitors appears to be the sum of SGLT1 compensation and residual SGLT2 activity.⁴ So, we agree with the authors of the letter that our wording is

overstated and thank them for pointing this out.

With respect to the second comment about Table 1, we aimed to review the most important effects of SGLT2 inhibition, and due to space constraints, we had to limit ourselves to effects to key organs. It is correct that SGLT2 is also expressed outside of organs mentioned by (i.e. kidney, brain, thyroid, and heart); we realize that the full list of all organs that express SGLT2 contains >20 organs.⁵

We thank the readers Martinez-Martin, Jimenez-Martin, and Sablon-Gonzalez for their awareness and suggestions.

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